

Task : Metrics Calculation

Given the following data for a team over one month:

- Total deployments: 40
- Deployments causing incidents: 6
- Time from commit to production (average): 3 hours
- Incident 1: Detected at 10:00 AM, resolved at 11:30 AM
- Incident 2: Detected at 2:00 PM, resolved at 2:45 PM
- Incident 3: Detected at 9:00 AM, resolved at 11:00 AM
- Incident 4: Detected at 4:00 PM, resolved at 8:00 PM
- Incident 5: Detected at 1:00 PM, resolved at 1:30 PM
- Incident 6: Detected at 11:00 AM, resolved at 3:00 PM

Calculate:

1. Deployment Frequency (per day, assuming 20 working days)
2. Lead Time for Changes
3. Change Failure Rate (%)
4. Mean Time to Recovery (MTTR)
5. Classify the team as Elite/High/Medium/Low performer based on DORA metrics

Deliverable: Document showing all calculations with explanations

DORA Metrics Calculation

1. Deployment Frequency (per day)

Deployment Frequency = Total Deployments / Working Days

Calculation:

40 deployments / 20 days = 2 deployments per day

Answer: 2 deployments/day

2. Lead Time for Changes

Given:

Average time from commit to production: 3 hours

Answer: 3 hours

3. Change Failure Rate (%)

Change Failure Rate = (Failed Deployments / Total Deployments) × 100

Calculation:

$(6 / 40) \times 100 = 15\%$

Answer: 15%

4. Mean Time to Recovery (MTTR)

First convert all incident durations to hours:

Incident 1: 1.5 hrs

Incident 2: 0.75 hrs

Incident 3: 2 hrs

Incident 4: 4 hrs

Incident 5: 0.5 hrs

Incident 6: 4 hrs

Sum of all incident durations:

$$1.5 + 0.75 + 2 + 4 + 0.5 + 4 = 12.75 \text{ hours}$$

Formula:

$$\text{MTTR} = \text{Total Incident Duration} / \text{Number of Incidents}$$

Calculation:

$$12.75 \text{ hours} / 6 \text{ incidents} = 2.125 \text{ hours}$$

Converted:

$$2.125 \text{ hours} = 2 \text{ hours } 7.5 \text{ minutes}$$

5. DORA Classification

Based on standard DORA ranges:

Deployment Frequency:

2/day → Elite

Lead Time for Changes:

3 hours → Elite (<1 day)

Change Failure Rate:

15% → Medium (Elite < 15%, High 15–30%) → Borderline

Mean Time To Recovery (MTTR):

~2 hours → Elite (<1 hour) or High (<1 day)

Final DORA Classification

The team mostly matches Elite performance except:

CFR = 15% → falls into High/Medium boundary

MTTR slightly above elite (<1 hour)

Overall Classification: HIGH Performer

The team is strong, close to elite, but slightly held back by CFR.

Summary Table

Metric	Value	Classification
Deployment Frequency	2/day	Elite
Lead Time for Changes	3 hours	Elite
Change Failure Rate	15%	Medium/High
MTTR	2.1 hours	High
Overall	High Performer	